

AMENDMENTS TO THE CLAIMS

1 1. (Currently amended) A control and safety system for a gas oven,
2 said gas oven comprising a gas burner and said system comprising:

3 oven operating means ~~for a user to regulate the operation of said oven;~~

4 flame sensor means ~~for detecting the presence of a flame in the burner;~~

5 a gas valve for opening or closing the supply of gas to the burner;

6 an ignition module for igniting the flame in the burner;

7 an electronic controller which receives a first signal from the operating means
8 representative of the user regulation, and a second signal from the flame sensor means
9 representative of the existence of a flame, said electronic controller acting, in accordance
10 with said first and second signals, on the gas valve and on the ignition module; and

11 gas flow regulating means ~~that regulate~~ comprising a gas thermostat that regulates
12 the gas outflow to the burner in accordance with the temperature in the oven and a
13 selected temperature, so that the electronic controller does not ~~need to~~ close the gas valve
14 each time that the temperature in the oven is greater than the selected temperature and
15 does not ~~need to~~ open the gas valve and act on the ignition module each time that the
16 temperature in the oven is below the selected temperature.

2. (Canceled)

1 3. (Currently amended) ~~A control~~ The control and safety system for a gas oven
2 according to ~~claim 2~~ claim 1, wherein the operating means comprise a knob which

3 regulates the gas thermostat, the temperature of the oven being selected using said knob
4 and activating, at that time, a switch, the first signal being representative of the status of
5 said switch, and producing through said electronic controller, if said switch is activated, the
6 opening of the gas valve and the activation of the ignition module.

1 4. (Currently amended) ~~A-control~~ The control and safety system for a gas oven
2 according to claim 3, wherein, once a safety period has passed after activating the switch,
3 the electronic controller closes the gas valve if there is no flame, the system remaining
4 shut-down and, if there is a flame, said electronic controller maintains the gas valve open
5 throughout the cooking process in normal operating mode.

1 5. (Currently amended) ~~A-control~~ The control and safety system for a gas oven
2 according to claim 4, wherein, after igniting the oven, the electronic controller makes the
3 ignition module initiate the re-ignition of the flame in the burner if it detects the absence
4 of a flame.

1 6. (Currently amended) ~~A-control~~ The control and safety system for a gas oven
2 according to claim 5, wherein the electronic controller closes the gas valve and shuts down
3 the system if, after detecting the absence of a flame and initiating the re-ignition, there
4 is still no flame present.

1 7. (Currently amended) ~~A-control~~ The control and safety system for a gas oven

2 according to claim 6, wherein, with the system shut-down, the electronic controller opens
3 the gas valve and activates the ignition module to attempt the re-ignition, closing the gas
4 valve and shutting down the system if, after the re-ignition, there is still no flame present.

1 8. (Currently amended) ~~A control~~ The control and safety system for a gas oven
2 according to claim 7, wherein the electronic controller closes the gas valve if said gas valve
3 is still open once ~~the maximum~~ a maximum preset cooking time has passed.

1 9. (Currently amended) ~~A control~~ The control and safety system for gas ovens
2 according to ~~claim 2~~ claim 1, the operating means comprising a knob which regulates the
3 gas thermostat, the temperature of the oven being selected using said knob and activating,
4 at that time, a switch, and said operating means also comprising a timer wherein the user
5 sets the cooking time, said timer receiving a signal representative of the status of the
6 switch, the signal the electronic controller receives from the operating means being the
7 output signal of said timer, the electronic controller acting in accordance with a starting
8 time and a finishing time, and the starting time or the finishing time, or both the starting
9 time and the finishing time being set in said timer.

1 10. (Currently amended) ~~A control~~ The control and safety system for a gas oven
2 according to claim 1, wherein the gas flow regulating means are controlled by the
3 electronic controller in accordance with a signal representative of the temperature of the
4 oven that said electronic controller receives.

1 11. (Currently amended) ~~A control~~ The control and safety system for a gas oven
2 according to claim 1, wherein the electronic controller checks its own status, closing the
3 gas valve if it detects any anomaly.

1 12. (Currently amended) ~~A control~~ The control and safety system for a gas oven
2 according to claim 1, the system further comprising viewing means that permit the user
3 to know the status of the oven.